AMERICAN INTELLIGENCE.

A Case of Anastomosing Aneurism of the External maxillary Artery, treated successfully by Tying the Common Carotid Artery, by David L. Rogers, M. D. Lecturer on Surgery. Communicated by S. R. Kirby, M. D.—This case occurred in a child, aged eight months at the time of the operation. At its birth a small pulsating tumour was observed in the centre of the right cheek, which continued to enlarge until it embraced nearly the whole of it.

It was bounded above by the prominent part of the malar bone; below by two thirds of the inferior edge of the inferior maxillary bone; posteriorly by the superior part of the inner edge of the sterno-cleido mastoid muscle, on a range from above downwards with the lobe of the ear; anteriorly, by a line drawn from the inferior part of the nostril, and terminating about one inch from the symphysis of the chin. The tumour pointed in two places, just above the ear, and at the angle of the jaw. It was irregularly convex, having its greater convexity at its posterior part, and gradually diminishing from behind forwards; its colour purplish, with several red spots on its surface. The child seemed otherwise in good health. The operation was performed in the presence of Drs. Mott, Baxter and Kirby, on Thursday, December 12th, 1832. An incision was made through the skin and the platysma myoid muscle, of about one and a half inches in length, in the direction of the inner edge of the sterno-mastoid muscle, but nearer to the trachea than to this muscle, which kept the external jugular vein at a greater distance; at the first incision a small artery was divided, which was secured with a ligature; the adipose tissue was cleared away, and very soon the sterno-thyroid muscle was partially exposed, at the outer edge of which, the sheath of the vessels was seen, this was punctured, and the artery secured with one ligature. No other vessels were tied, and the quantity of blood lost did not exceed a wine-glassful. In a short time a diminution of the tumour was perceptible. A stitch was made in the middle of the incision, and adhesive straps applied. The little sufferer was not much exhausted, it was placed in its mother's arms, and immediately began to nurse, with occasional restlessness. A gradual diminution of the tumour continued until it had entirely disappeared, and the child wholly recovered, and is now in good health.

New York, August 6th, 1833.

Case of Constipation successfully treated by the Introduction of Air into the Bowels. By George J. Janeway, M. D.—*July 7th*, evening. I was called to see H. M., who was attacked last evening with a severe pain in her abdomen, which continued the greater part of the night, and was relieved by laudanum and the application of a sinapism. She has had occurrences of the pain through the day. Two or three days ago, in consequence of imprudent exposure during her menstrual period, her menses were suddenly stopped. On the 5th inst. I had prescribed for her a bleeding, for an affection of the heart, under which she is labouring. She also took a dose of Epsom salt.

She now complains of severe pain around the navel, which is relieved by pressure; pulse full, hard, and frequent, such as is met with in hypertrophy of the heart; tongue moist, a little furred in the centre; skin of natural temperature; her cellular tissue is infiltrated with serum; abdomen somewhat swollen. Her pain was soon relieved by the exhibition of laudanum and ess. of peppermint; flannel wrung out in hot brandy and Cayenne pepper. Directed castor oil, ℥j.

July 8th. Her pain returned soon after I left her, and has continued. Her bowels are more swollen; pain as before; no pain on pressure in any part of abdomen; tongue, pulse, and skin as before. V. S. ℥xvj.; fomentations of hops; calomel, grs. xij.; oil four hours after. Her bowels have not been opened since the 6th.

6 P. M. Bowels not open; vomiting occasionally; abdomen more tympanitic; pains more severe; respiration hurried and somewhat oppressed. Soda water; repeat calomel; injections of senna tea.

10th. Since the preceding date, all the symptoms have gone on increasing in severity, for which I directed at different visits, leeches and cups to abdomen, cups to small of back, injections of warm and cold water, emollient injections, calomel and senna tea, fomentations to abdomen, &c. all without success. Bowels are still confined, greatly distended with gas; pulse pretty much as before; tongue furred in centre and moist; skin nearly natural; breath excessively fetid, can be smelt at the distance of several feet; belches considerably; hiccup occasionally; vomits a dark, fetid, oily fluid; respiration frequent and oppressed; face pinched.

At this time I determined to try the effects of the introduction of air into the bowels. Accordingly I attached one end of a bladder to the tube of a bellows, while a glyster pipe attached to the other end was introduced into the rectum. The bellows were used a few minutes, during their use a fetid gas escaped from the rectum, in such quantity as to be smelt in different parts of the room. Immediately after the removal of the bellows, the patient passed by stool a pint of very fetid, dark fluid, together with a considerable quantity of gas. She felt somewhat relieved. A short time after, the bellows were reäpplied with similar effects. A drop of croton oil was then given, and another at the expiration of two hours; the bellows were used twice afterwards.

Evening. Patient is much relieved; has had six passages by stool since the morning, she passed at the same time great quantities of gas. From this time she speedily recovered from her bowel affections. Her stools did not become of a natural appearance till some days after.

New York, August 1, 1833.

Case of Prolapsus Uteri from Dysmenorrhœa, together with the Formation and Expulsion of an Organized substance. By JOHN W. MALONE, M. D. of Quincy, Middle Florida.—On the 30th September, 1831, I was called to see a lady, who was said to be suffering very much from a *prolapsus* of the womb. Upon my arrival, she informed me, that her menstruation had been very scanty and painful for a day or two previous, and that last night her symptoms were very much aggravated—in fact, to use her own language, she said "her body came down," meaning by that a prolapsus uteri. She complained of great pain in her back and lumbar region in general, and also at the pubis and in the groins, darting sometimes upwards to her left side; there were bearing-down pains, and a sensation as if something were protruding per vaginam, great difficulty and constant desire to void urine, which came away by drops only, her sufferings were much increased whenever she was raised in bed or stood erect, she was quite nervous, and her bowels were obstinately constipated. The pulse was perfectly natural, no gastric derangement except once and a while she was troubled with flatulence.

I gave her an anodyne draught as a palliative until I could investigate her situation further—this gave her but temporary relief, and in the course of an hour or two I proceeded to an examination, and found the uterus prolapsed as anticipated. Not having a pessary at hand, I gave her ol. ricini.; ordered cold applications, together with spts. nitre and laudanum at bed-time, and enjoined perfect rest with the hips elevated, in order to keep the uterus as much as possible in situ.

31st. Had spent the night rather less unpleasantly than the preceding, but still she was in great distress. The difficulty in urinating was more obstinate, amounting almost to a total suppression. Upon the introduction of the catheter, a large quantity of turbid urine flowed off. The menses appeared during the night for a little while. The darting of the pain from her groin up to her left side was more constant, no evacuation from her bowels had been effected by the oil. I immediately ordered an injection, and after its operation introduced a sponge pessary, and enjoined it upon her to remain in the recumbent posture; she felt much easier, and dropped off into a short but refreshing slumber: towards evening the pain again returned, and became so intolerable that the pessary was removed. Astringent injections were then freely thrown up the vagina, and an anodyne draught of camphor and laudanum was given at bedtime.

October 1*st*. Found my patient sitting up in bed, had slept well during the night, but this morning had slight pains, which were attended with the expulsion of a thin membrane of a pearl colour; feels now entirely free of pain, and has no difficulty in voiding her urine, &c. Still continue vaginal injections, remain quietly in bed, and keep the bowels open with senna and the neutral salts. Two days afterwards I visited her, and found her still improving, though she complained of weakness and sluggishness of the bowels: ordered a plain and nutritive diet, mild laxatives and gentle exercise, together with a preparation of iron and myrrh, as there appeared to be a want of tone in the whole system, and the uterine in particular.

She continued this course for more than a month, and the last time I saw her she was enjoying very good health, and had not had a return of "*prolapsus*" since.

The only inducement to publish this case, is the circumstance of its being the consequence of "painful menstruation," which to me is self-evident, as she never was similarly affected before; and from the sudden production of it; upon the occurrence of the painful efforts common to this disease; and from the prompt effect of the astringent injections, it clearly manifests a want of tone in the uterine fibre, and a relaxation of the parts, that readily yielded to the bearing-down pains of this distressing affection.

Hot Springs of Virginia.—A correspondent has favoured us with a detailed account of the medicinal value of these thermal waters in three cases of very obstinate disease, of which we have thought proper to make a digest. In the group of mineral waters commonly known under the appellation of the Virginia Springs, and which are scattered in the southwest part of the State, over an area of forty-five miles diameter, there is a small cluster called the Hot Springs, the temperature of which ranges from 99° to 108°. The popular belief is, that they are extremely useful in rheumatic and many other affections, when used as a bath, or by submitting the diseased region to the stream of the spring whose temperature is 108°. This establishment has recently passed into the hands of a highly enterprizing and intelligent proprietor, Dr. Goode, who by accommodations actually existing and by such as are in progress, promises to make this a retreat well worthy of the invalid, or the man of leisure who wishes to spend a short time from home.

The first patient, Mr. Corrie, of Charleston, S. C., aged 18 years, was afflicted in 1832 with a rheumatic affection, which rendered him as helpless as an infant; he was unable either to dress or undress himself, and whenever he changed his place, he was under the necessity of being carried. Having reached the White Sulphur Springs on the 28th day of June, he remained there until the 9th of July, drinking daily eight or ten glasses of the water, by which he was sufficiently improved to walk with the aid of crutches, three or four days before he left there. He then went to the Hot Springs, distant thirty-five miles.

At the latter place he took on alternate days the hot stream as a douche, and the sweating bath until Sept. 2d. In two weeks after he instituted this process he laid aside his crutches, and resumed the unaided use of his limbs, and at the expiration of the whole period, he was so fully convalescent, that being caught in a storm at sea on his return home, he assisted in the securing of the vessel.

The second patient, Mr. Lockwood, from his own account, seems to have had an extensive dartrous affection which for ten years had defied the best medical counsel of Charleston, S. C. The incipient eruption was in small specks, covered with a scale, and which increased in size until they joined. The whole body was subject to this affection; the eyebrows, lips, and nostrils, without intermission—the other parts of the face and hands not so much so. The itching was so extreme as to produce almost derangement; the scales rubbed off at night under this excitement would fill a small saucer, and the night-dress was stiffened with the discharge of blood. The scales were renewed every twelve hours. The only application which afforded any comfort was the white of a fresh egg rubbed up with a tea-spoonful of sweet oil or fresh cream, any rancidness in the latter produced an irritation like a fire-brand.

This patient is now on his third annual excursion to the springs, having in each instance used the White Sulphur water for ten days in the outset, and then gone to the Hot Springs, where he has resorted on alternate days to the spout of warm water and to the sweating bath. He has now not a vestige of the complaint, and there is no indication of a return of it, (Aug. 7, 1833.)

We have also the account of another case of rheumatism, in the person of Mr. Booker Preston, of Bedford, Va., which began in 1827, and which seems to have been of a very severe and enduring character. It was, however, also relieved entirely by the use of the pool called the boiler, at the Hot Springs.

W. E. H.

Description of a Safety Stirrup. By Samuel Jackson, M. D. of Northumberland, Penn. [Communicated in a letter to the Editor.]—The business of the practical physician is not merely to prevent or cure diseases, but also to obviate all the casualties to which we are liable in the journey of life; hence, though the present paper may not be quite medical, or pertain, very strictly considered, to the pages of your journal, yet inasmuch as it recommends the means of safety to your numerous readers, most of whom are country practitioners and riders on horseback, it will not, by them at least, be thought out of place. Were I to present them with an effectual preventive or cure of hydrophobia, how great would be their exultation; and yet what we are now recommending might have prevented more death and distress, in this neighbourhood at least, than has ever resulted from rabies canina. Not one case of this disease has been known within a radius of fifty miles from this place, and probably not within a much greater distance, for the last half century, while, within this very vicinity, and within a very few years, the most distressing lacerations and even death have been the sad consequences of persons being dragged by the stirrup.

It is generally supposed that the spring stirrup, which opens at the side, affords safety in these cases, and there is an extract from one of my letters in the Medical Recorder, Vol. XI. p. 203, in which it is highly recommended as securing the exit of the foot, let the rider fall in whatever way it is possible. But we have since learned from the actual experiment of falling and hanging by the stirrip *in propria persona*, that our opinion, so confidently advanced, is utterly erroneous.

After using the stirrup for many years with the most comfortable assurances of safety, I was at last thrown, and my foot was held fast by it, while my head and shoulders rested on the ground. In this dreadful situation, my horse, though young and high-spirited, stood quiet by my side, while with infinite labour and pain, I extricated my foot. I was then told that the rust of the hinge was the cause of its refusing to open, but this was a great error, as was proven by the following decisive experiment.

The hinge was well greased, and made to work with very slight force; I then extended myself on the carpet with my foot in the stirrup, and giving the leather to my servant, I found it absolutely impossible to open it with my foot. The operations were varied in every way in which it was thought possible for a man to fall from his horse, and with the same result. The foot turns quickly round in falling, and hangs by the foot-piece of the stirrup.

I mentioned these things to my talented friend, Mr. Henry W. Snyder, of Selinsgrove, son of the late Governor of Pennsylvania, and he quickly made me a pattern of a stirrup, which I have since procured to be made by George Taber, of Philadelphia. It can be easily understood from the plate. Fig. 1, the entire stirrup. Fig. 2, a side view. Fig. 3, the foot piece.

Fig. 1.

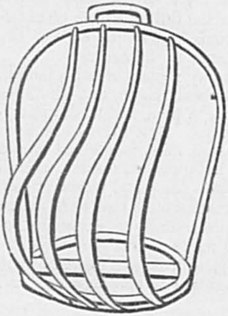


Fig. 2.

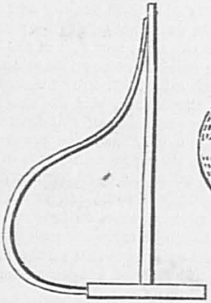
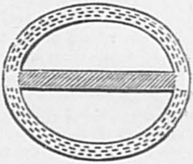


Fig. 3.



For an adult, three of the upright or safety irons are sufficient, but as the stirrip may be used by very young persons with small feet, they ought to be very close, and five would be required. These safety bars may be an inch broad. In order to afford him foot-hold, the foot piece ought to be broad, and the opening in it guarded by a bar in the transverse diameter, as seen in the plate.

We cannot recommend this as a very handsome part of a horseman's caparison, but it is certainly not very unsightly; and until something better be invented, we beg leave to obtrude it upon the attention of all who would ride without fear of the deplorable consequences of being dragged by the common stirrup. Nearly all the evils attendant on human life are the immediate or remote consequences of neglecting either the moral or physical laws, by which our safety is ensured; and if any one reads this paper without availing himself of this cheap and easily procurable prophylactic, let us refer him for further instruction to one of the best books that ever saw the light—Combe "on the Constitution of Man." "We ought," says this author, "to trace the evil back to its cause, which will uniformly resolve itself into infringement of a natural or moral law; and then endeavour to discover whether this infringement could or could not have been prevented, by a due exercise of the physical and mental powers bestowed by the Creator on man."

Case of Incongruous Twining, (Nosology, Good.) By Thomas J. Charlton, M. D. of Bryan County, Georgia.—I was called to visit a woman belonging to Mr. Clay of this county, who was said to be nearly nine months advanced in her third pregnancy, and to be suffering under a sudden affection of the womb, which her attendants supposed to be a prolapsus. On examination I found the lower extremities of a fœtus in the vagina, it was extracted with no difficulty and with the slightest exertion. Upon making a section of the umbilical cord no blood issued, nor had there been any discharged from the uterus before I saw her, neither had she had the slightest pain; the symptoms which alarmed her and occasioned my being called, was a sensation of faintness which I attribute to apprehension of danger excited by the nurse. The fœtus was not putrid, but had evidently been dead some weeks; it was apparently one of the seventh month, and was in appearance and to the smell as if it had been preserved in pyroligneous acid; the viscera were much diminished in size, and externally it consisted merely of the integuments closely applied to the bones. As there was neither pain or flooding, I did not deem it proper to introduce the finger into the womb, fearing that the premature expulsion of another child, the motion of which I plainly felt on the application of my hand externally, might be caused by such interference. I directed her to be kept quiet, and that I should be immediately summoned should any of the precursors of labour occur. For eight days she was without any symptoms, on the night of the ninth labour came on, and the delivery of a child healthy and of the full time took place before I could see her. On examination of the placenta I found the cord of the former birth attached to the side, and that of the latter to the centre.

I am aware that many cases have been mentioned by writers of twins born at remote periods from each other, but what I thought remarkable, and which has led to the report of the above case, was, the absence of pain, and to all appearance of contraction in the expulsion of the dead fœtus. The uterus has been said to be "a life within a life," and the occurrence here mentioned would give some confirmation to its supposed powers of independent resolve, as well as action; for the casting off of the dead fœtus without the usual means of pain and contraction, would imply in some degree a consciousness that such means were not fitted for the present case, as tending prematurely to expell its remaining contents. Or to speak more accurately, I may say, that the above circumstances are additional evidences that all the organs, and most especially the uterine system, have the faculty of adapting themselves to contingencies and abnormal occurrences.

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On the Pathology of Cholera. By Charles A. Lee, of New York. [Extracted from a letter to the Editor.]—I found at a very early period, that the pathology of cholera was likely to be a subject of warm dispute among our physicians, as it has been in Europe and Asia, and I endeavoured to keep my own mind perfectly unprejudiced, while observing and investigating the nature of the disease, that I might arrive at correct conclusions. Being fortunately placed in the most favourable circumstances to observe the disease, and pursue post mortem examinations, I endeavoured to improve them to the best advantage; and the numerous facts which I have collected go to confirm me in the opinion that the phenomena of cholera can only be satisfactorily explained, by the existence of an intense irritation of the gastro-intestinal mucous membrane. It was a fact very generally observed during the epidemic, that, hypercatharsis was often caused by laxative and purgative medicines in ordinary doses, and all who had opportunity of treating the disease to any extent, acknowledged the danger of administering such articles. For the same reason, crude vegetables and other indigestible food, (which acts as foreign substances,) were proscribed, and the most bland diet recommended. Within my own knowledge, instances were frequent where an attack of cholera was brought on by a cathartic, of which I will relate a few as examples.

Miss R., a young lady of respectability, on returning from the city towards the close of the epidemic, took a dose of bilious pills, on going to bed, and was attacked with violent diarrhœa in the night. In the morning early, she was in a collapsed state. Previously to taking the pills, she was in perfect health. She died. Mr. and Mrs. L., by the advice of a neighbour, took a large dose of epsom salts for two mornings in succession; hypercatharsis followed. They were removed to the hospital, where both died. J. C. complaining of slight nausea, took, by the advice of a physician, an emetic of tart. antimony; a violent attack of cholera succeeded, from which he with difficulty recovered. J. H. was advised, by way of precaution, to take a dose of physic. He took calomel and jalap, āā gr. x.; a violent diarrhœa succeeded, and terminated in collapse. Numerous other cases of a similar kind could be given, but it is unnecessary. So generally acknowledged is the existence of this morbid irritability of the gastro-intestinal mucous membrane in this disease, that all prophylactic measures, both dietetical and medicinal, appear to be based upon it.

Another fact which early led me to the belief of an exalted action of the secretory vessels of the mucous tissue, is the analogy existing between the symptoms of cholera and those caused by the acrid poisons. Of several cases which I might relate, I can give at present but the two following. In January, 1828, I was called to see a delicate woman who had taken an overdose of tart. ant. I found her with features shrivelled, a livid areola about the eyes, which were sunken, voice a whisper, pulse imperceptible, great jactitation, vomiting and purging a colourless fluid without smell, cold sweat over the whole surface, and violent cramps in the muscles of the extremities. In July, 1832, I was called from the cholera hospital to visit a young woman who had swallowed, a few hours previously, half an ounce of arsenic. On seeing her, had I not known the cause of her attack, I should have had her immediately removed to the hospital, as a well-marked cholera case, as she had all the symptoms of a patient in the collapsed stage. Here then are two cases of intense concentration of innervation upon the mucous membrane of the stomach and intestinal canal, from the action of well-known irritants, and the symptoms were those of cholera. Is it possible that a directly opposite condition of the same membrane, would give rise to the same phenomena?

The opponents of this pathology of cholera appear to me to level all their arguments against a phantom of their own creation. They stoutly deny the existence of INFLAMMATION, which few or none contend for, while they frequently concede, which is all we ask, the existence of a high grade of *irritation*. If life be sufficiently protracted after an attack of malignant cholera, the latter may, and generally does terminate in the former; but that any pathologist should seriously look for the traces of inflammation in a disease of six or twelve hours standing, is very strange. Post mortem appearances sustain most unequivocally the doctrine of irritation, so far as its pathology is understood; for it should be borne in mind that in cases of sudden death from large doses of arsenic, colorations and other marks denoting inflammation, have been entirely wanting.

New York, Sept. 4th, 1833.

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Case of Cancerous breast, with Partial Ossification of that Organ. By JOHN MACLELLAN, M. D. of Green Castle.—Mrs. H——, aged fifty-eight years, had a cancerous breast, which I extirpated on the 18th of July, 1831, assisted by Drs. M'Gouvrin and Green. It was of enormous size, and had been enlarging for twelve years, and weighed thirteen pounds. It was ulcerated on the surface in two spots, and there were collections of cancerous matter in several places throughout its substance. What was very remarkable, however, in this case was the existence of bony deposits in the centre of the breast of several inches extent in different directions. I have some of this part of the breast preserved in alcohol, in which the bone is very manifest. The artery next the sternum was very much enlarged, and bled profusely when cut. The other arteries were as usual. The glands in the axilla were not enlarged. The wound healed in a great measure by the first intention. We saved skin enough to cover it, and brought it well together by ligatures and straps of adhesive plaster. The breast was painful for a considerable time before it was taken off, and the weight of it was oppressive. It extended down to her waist, and in walking she supported it with her hands. This woman never had any children, though married when young, and her other breast was small and not pendulous.

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Case in which a Stiletto Remained for Twelve Years Projecting into the Brain.—In the pathological collections belonging to the Hospital Santa Maria Nuova, at

Florence, there is a portion of a parietal bone in which the point of a stiletto is projecting through the inner table nearly an inch. This was found so at the patient's death. The scalp had healed over it, and the injury occurred twelve years before the patient's death.—*Med. Magazine, Sept.* 1833.

Cases of Periodical Diseases treated with Ergot, in Mississippi, 1825. By Henry Perrine, M. D.—Case I. Joe, a negro, taken with a chill and fever, Tuesday, 5th July, 10 A. M. which lasted till the middle of the afternoon. A dose of calomel given during the hot stage acted as emetic and cathartic; discharges copious, but not much vitiated; sleepy at night.

Wednesday.—Took a large table-spoonful of Peruvian bark this morning; chill and fever worse to-day; tongue still nearly clean. *Night.*—A dose of calomel and opium at bed-time; half a pint of strong infusion of quassia to be taken in half-gill doses every two hours while awake.

Thursday morning.—Calomel has not operated as a cathartic. ℞. ʒj. powdered ergot to be taken before chill time. *Afternoon.*—No chill, no fever, no catharsis during the day; lips are breaking out; gums becoming sore. ℞. A dose of salts, which at night operated well. Two worms were passed.

Friday.—Says he is well except weakness.

25th July.—Still well.

January 1st, 1826. Has not relapsed.

Case II. John, a mulatto. *Saturday, 9th July, afternoon.*—Slight chill and fever.

Monday forenoon.—Severe and long chill and fever. Took the emetico-cathartic of salts and tart. ant. during hot stage, followed by Epsom salt and magnesia in the afternoon, and calomel at night.

Wednesday 18th.—Took three doses of ergot, each fifteen grains, in two hours previous to the chill, which came on between 9 and 10 A. M. and the fever lasted till in the afternoon.

Friday 15th.—Has taken this forenoon, in four doses, seventy-five grains of ergot, which induced no sickness, and have not been followed by either chill or fever.

Monday, 25th.—Continues perfectly well.

January 1st, 1826.—Has had no relapse.

Case III. Lucy, a negress, was sick at the same time with Joe, but was cured by bleeding, purgatives, and bark. After spinning several days, a *head-ache* came on in the afternoon of each day, which was soon accompanied by a slight fever, not relieved by continued purgatives.

21st July.—Took fifteen grains of ergot four hours previous to the expected paroxysm, which puked her in half an hour; and the next equal dose having the same effect, I gave her, at forty minutes apart, three doses of ten grains each, with a little pepper. Neither puked her, nor has her fever or head-ache returned to-day.

25th.—Has taken nightly laxatives—head-ache has not returned.

January 1st, 1826.—No relapse.

Case IV. Leah, a mulatto woman, twenty-five to thirty years old, mother of four children. Last summer delivered of twins at seven months, both dead. Has had but four or five menstrual discharges since; in all coagula with pain at "the bottom of the belly." A few weeks since was attacked with *periodical head-ache*, for which she was depleted very profusely, and repeatedly by venesection, emetics, and purgatives, without entire relief. Has had for a few days past an evening recurrence of the same head-ache. Says that she has been subject to it every summer as long as she remembers since womanhood.

25th July.—Yesterday catamenia came on. To-day very painful, with expulsion of coagula. To-night feels tumid in the hypogastric region—has taken two doses of camphor without affecting the pain in her head. ℞. Four fifteen-grain doses of ergot at intervals of ten minutes each. After second dose, complained of increased uterine pain for a minute, at intervals of five minutes, but says her head-ache is principally gone.

26th.—Waked this morning by severe uterine pain, which was relieved by local heat. Menses did not flow during the night, but to-day are natural in quantity and quality. Drank horehound tea through the day.

September, 21st.—Has continued free from head-ache.

January 1st, 1826.—No relapse.

Remarks.—The male cases may be questioned. The female cases were evidently cured by the ergot alone. I shall experiment with the ergot again under similar circumstances.

Campeche, September 10th, 1833.

Note on the supposed efficacy of Peruvian Bark as an Antidote to Arsenic. By HENRY PERRINE, M. D.—I perceive under the head of American Intelligence, in the May No. of your Journal, a 'note' to yourself "On the Peruvian Bark as a counter-agent to the Poisonous Effects of Arsenic," which was elicited by the outlines of my own case in your number for November last. The note itself simply contains the report of an unknown third person's having successfully treated several cases of poisoning by arsenic, with large doses of Peruvian bark *and milk*, without stating whether they were followed by *vomiting*, and thinks it therefore worthy of inquiry how far the action of the poison may have been checked by the Peruvian bark in my case. Hence, in this note to yourself, I say, that in my opinion the powdered Peruvian bark had in my stomach about the same effect as an equal quantity of pine saw-dust, chesnut charcoal-powder, ground Indian corn, or any other comminuted matter with which the undissolved arsenic would as readily mix, to which it would as firmly adhere, and with which it should as soon be carried out of the stomach by vomiting. As *milk* by coagulating *in* the stomach is infinitely preferable for these purposes, I drank it abundantly, but hurried out the coagula, and their enveloped arsenic, as soon as formed, with mucilaginous drinks and blue vitriol—of which seven doses were taken in rapid succession. Having no faith in antidotes, as soon as the vomited fluids exhibited no traces of arsenic, I tried to make the remaining poison travel through my intestines as fast as possible; and as calomel in pills was the only purgative which my stomach would retain, I continued it aided by numerous glysters, until the discharges from the bowels no longer turned green with a solution of the sulphate of copper, which occurred on the morning of the fourth day. I should nevertheless have probably died, had not the magnanimous mercury, at the most critical period, pervaded my system and equalized its circulation; nor was that the only dangerous epoch in which I have owed to this noble medicine the continuance of my feeble existence.

Consulate U. S. A., Campeche, September 10th, 1833.

St. Augustine, East Florida, as a Resort for Invalids.—The Twelfth No of our esteemed cotemporary, the *Medical Magazine*, contains an interesting communication from Dr. L. V. BELL, in which the statements hitherto made of the propitiousness of the climate of St. Augustine to persons labouring under pulmonary affections are directly controverted. "St. Augustine," observes Dr. Bell, "like all the settlements on our southern frontier, has been the occasional place of resort for northern invalids from time immemorial, but it is only since the change of flag in 1821, that any considerable numbers have visited it, and only within the last four or five years that much attention has been directed to it, as possessing any peculiar advantages over the southern states generally. This late notoriety is justly and almost entirely ascribable to the efforts which have been made to attract public attention and create an artificial reputation for the place, by the publication of such statements and circulars as have been alluded to, which have been very extensively circulated throughout the New England and middle states. In fact, of about one hundred invalids who were there in the winter of 1830–1, I had from personal acquaintance, reason to know that more than three-quarters were immediately induced to give it the preference from the influence of these accounts.

"In the present communication the writer regrets that many of the statements heretofore made to the public must be directly controverted. He would however premise that he does not intend to call in question the veracity of those who have given different views, many of which he is aware were predicated on supposed authentic data, the real errors of which will be pointed out, while other flattering conclusions were drawn and published after so very limited residence and research, that subsequent more extended opportunities must have shown the writers how much they were themselves deceived, and how much in turn they had misled the public.[*] I can pretend to offer, as respects the climate, only the results of personal experience during one season, and that no doubt one of rather unusual severity, but I took every caution scrupulously to avoid all error in my own observations as well as to corroborate every statement heard, as to the inclemency of former winters, by inquiries among *unprejudiced* and *uninterested* citizens who had been residents for a greater or less period of time.

"The *city* of St. Augustine, (it being a corporate municipal body,) is situated in latitude 29° 51′ N. on the eastern shore of the cape or peninsula of Florida, and on a bay formed by the junction of three short tide rivers, the Matanzas, St. Sebastien's, and the North. It is at the distance of about two miles within *the bar*, which stretches from the main land to Anastasia Island. This bar renders the entrance or exit of vessels drawing more than 9 or 9½ feet of water impracticable, and is said to be constantly changing its direction, leaving a very circuitous channel much influenced in its depth and direction by the tides and winds. The attempt is rarely made to enter without a pilot; and from the natural obstructions, as well as the want of capacity, indolence or absence of competition among the pilots, the harbour is justly esteemed one of extreme difficulty. It is no unusual circumstance for vessels to be detained at the bar for weeks, (a most tantalizing situation for the sea-worn invalid,) and they have occasionally returned or changed their destination, having waited in vain for the pilots.

"The surf breaking on the outside of Anastasia Island in certain winds is tremendous; when heard in the city it resembles very much the roar of Niagara Falls, a circumstance not a little annoying to the sick before the ear becomes accustomed to the sound.

"The city, which is surrounded by a small creek called the Mari Sanchez, swollen however into a considerable stream at high water, consists of four or five streets, from sixteen to twenty feet only in width, running nearly parallel to the Matanzas, about half a mile in length, and intersected every few hundred yards by others crossing at right angles. A considerable open space is left near the middle of the city which is dignified with the appellation of *Plaza de la Constitucion*, in the centre of which is a monument of plastered shell rock, built in commemoration of the constitution granted to Spain by her monarch. Around this square the three or four churches, and public buildings are situated. The streets are in general built upon pretty compactly, but a great number of the habitations are in a deserted and completely dilapidated condition. The exterior of the buildings is of a most unpromising description, resembling at a general view an irregular conglomeration of roughly plastered hovels; and in fact, the entire aspect of the place is that, which is actually its case, of 'having seen better days.' There are, however, some half dozen of the residences, which are tolerably convenient and comfortable. The dwelling-houses generally bear some marks of the Spanish taste, as in having the entrance through a high court-yard, balconies projecting over the street, &c. There is, however, too little uniformity in external appearance or internal construction to allow their being referred to any one model. The floors of many of them are constructed of *tabbia*, a mixture of lime and shells, which becomes in time much consolidated and smooth, but in winter is cold, damp, and uncomfortable. The material of which almost all the houses are constructed, is a conglomerated shell rock, which is found abundantly on Anastasia Island, within a few miles. When first removed from the quarry, its structure is so soft as to allow of its being prepared for building by being hewn with the broad-axe, but it attains a considerable degree of solidity after long exposure to the atmosphere.

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[*] "The late Dr. James Cox, who left Philadelphia, and settled in practice at St. Augustine, the climate of which he, it would seem, vainly supposed, had cured him of a chronic bronchitis under which he laboured, and whose circular giving an overrated account of the prospects of that place in pulmonary maladies, (though his statements were far from being so exaggerated as those of some others,) were widely spread in the Journal of Health, N. A. Med. and Surg. Journal, &c. had the magnanimity to declare that, had he known as much of the climate of Florida at the time of publishing his circular, as he subsequently learned, nothing could have induced him to advise an invalid to seek such a situation. He also expressed to me his intention of informing the public of the errors in his first statements and opinions. Whether or not the community were ever disabused in relation to this subject in the same channels in which the accounts were first published, I have not learned.

"This is the only kind of *rock* found in this section of Florida. The whole surrounding country is a perfect level of sand, intermingled with broken pieces of shells, and destitute of every mineral production, even the smallest sized stone. No natural elevations, even of a few feet, are to be found.

"The agricultural productions of the vicinity are almost nothing. A little market-place is furnished with one beef, uniformly of miserable quality, which is adequate to the consumption of the whole place, with fish of some variety, including a small and indifferent species of oysters, and rarely with pork and poultry. Mutton is never seen; sheep, it is said, being immediately destroyed when turned to pasture, by a small sharp-pointed bur called the *cockspur* which grows every where. Garden vegetables of all kinds, as well as hay, butter, apples, &c. must be brought from the north, and are generally of indifferent quality and high prices. The market is so limited and the number of vessels arriving so small, that there are frequently long periods in which some of the most necessary and essential articles cannot be obtained at all, or only at the most exorbitant rates; butter for example, at seventy-five cents per pound. With a soil and climate capable of producing almost every article of vegetable use or luxury, such is the indolence and want of enterprise of the great bulk of the population, that they prefer subsisting day after day on fish, oysters, and the sweet-potatoe, to the trouble and labour of raising breadstuffs, garden vegetables, poultry, &c.

"The only article of export, and what *with the exception of invalids* forms the only article of *traffic* of the population, is the crop of oranges; of these one hundred and twenty thousand are raised in an average year, worth ten dollars per thousand on the spot, and there is always a very ready demand for them. But strange as it may seem, where the land is cheap, the growth of the trees quick and easy, seven or eight years from the seed being enough to render them profitably productive, the quantity raised per annum increases very slowly, almost no new plants being set out.

"The population of St. Augustine, by the return of the marshal at the census of 1830, was as follows:—

White males	570	Slaves	474	Total, 1708.
White females	538	Free blacks	126	
Whites,	1108	Coloured,	600	

An amount very much below the statement of any gazetteer or account which I have seen. Of this population, a great proportion of the whites, probably not less than seven to eight hundred, are *minorcans*, as they are called. They are descendants of a colony of redemptioners, brought out from the Balearic islands, in 1785, by one Turnball, an Englishman, to New Smyrna, or Musquito Inlet, about sixty miles south of St. Augustine. From fear of being permanently retained as slaves, and finding him unable to fulfil his contract for their support, they abandoned him in a body and came to St. Augustine, where they have since lived almost unmixed with the Americans, retaining all their original ignorance, indolence, and superstition. They speak a kind of *patois*, between the

Spanish and Italian, and are without exception Catholics with the feelings and views of a century or two gone by. From what has been said it will be readily inferred, that almost all those articles which are so comfortable and almost essential in sickness, are to be had only from a great distance, or what happens continually in so small a market, not to be obtained at all. Milk, usually considered so important an article of diet in consumptive cases, was not to be procured except with much difficulty, and in very small quantities; so much so, that probably no invalid there attempted to make it an exclusive, or principal article of food. In fact, the sick are constrained to do without those thousand articles of caprice or utility, which at the north are ever ready to soothe the fancy, or alleviate bodily distress.

"The privileges of taking exercise at St. Augustine are few and inconvenient. After leaving the immediate bounds of the city, there is nothing to interest or amuse the mind. A perpetual succession of scrubby woods and barren sands, without one pleasant landscape or agreeable view, presents few inducements to prompt the invalid to embrace that valuable auxiliary in chronic disease, exercise in the open air. The means of gestation are few and very expensive. Horses are almost unknown, their place being very imperfectly filled by a breed of Indian ponies about the size of the common jackass. Carriages of every description are hardly to be obtained, nor any kind of boat, the rowing and sailing which is often an agreeable and salutary mode of exercise, except the miserable, inconvenient, unsafe *dugout* or log canoe.

"In short, (excepting the climate, whose claims to attention we shall shortly examine,) St. Augustine possesses in a most eminent degree the deficiency of every thing which can amuse, improve, or restore the invalid, and the presence of every thing which can serve to irritate his feelings, impoverish his estate, and disappoint his hopes.

"I have gone considerably into these statistical particulars respecting this place, being induced by the fact that all our gazetteers give very erroneous accounts of it, several of them stating its population to be from four to five thousand, one placing it at the foot of a *considerable hill*, &c.; and still more from the circumstance that the circulars addressed to invalids, for obvious reasons, attempt to keep up the impression that it is a large flourishing city.

"The statements respecting the climate of this part of Florida, which have been repeated in all the various accounts, have had as a pretended basis actual thermometrical data. But it may be, that even these which at first sight appear incapable of misleading, agreeable to the old axiom that 'figures cannot lie,' are in fact easily distorted, so as to convey very erroneous impressions as to the value and expediency of the situation for the valetudinarian. The error which has most prominently affected these statements, has arisen from the unfair, injudicous exposure of the instrument from which the observations were made. The published memoranda have been those abstracted from the journal kept by a military regulation of the government at the barracks. The thermometer, apparently an ordinary, cheap, American instrument, is suspended in the second story of an immense stone building, at the side of a door which forms a communication between two large rooms, each of which has two open windows on the S. E. and N. W. sides. The whole story is surrounded by a roofed piazza, twenty or twenty-five feet in width, so that in fact, the thermometer is not within some forty or fifty feet of the open air. A moment's reflection will convince any one at all acquainted with thermometrical observations, of the absolute inutility of such an arrangement to give any thing more than an approximation to the actual temperature.

"The other instrument from which, I believe, some of the published data were derived, is suspended, if possible, in a still more objectionable and absurd situation; that is, under a piazza of stone, the whole interior of which is whitewashed, so that a constant reflection was thrown upon it when the sun shone. Both of these instruments, in every instance in which I compared them, indicated a considerable difference between each other, as well as varying from the one from which I kept the register below.

"The hour of the day, (2 o'clock,) at which the middle observation was taken, is far from expressing the highest range of heat, and it was solely on the ground of convenience that its selection was defended. In a series of observations made for the purpose, I invariably found a fall of the thermometer after about 1 o'clock. This error has given the climate an appearance of considerably greater uniformity than it actually possesses, and it has been on this point, its boasted evenness, that visitors have been most deceived. The Rev. Dr. Porter, of Andover, whose letter on the climate, &c. of St. Augustine, was circulated by those interested far and wide, was induced to believe, (though I am unable to divine on what grounds, or from whom he could have derived his information,) that a change of 12° in the twenty-four hours was very unusual, and that changes greater than this were almost unknown. So far from such being the case, the examination of my table of memoranda for Jan. and Feb. 1831, will demonstrate the fact that there was hardly a day in which as great change was not noticed, as well as repeated days when the variation was from 20° to 30° in the twelve hours of day-time; and had the observation at meridian and at the coldest part of the night been recorded, the inconstancy of the temperature would have been still more palpably striking. Some sudden changes will be noticed in the table which could not be surpassed in the mutable climate of New York.

"It has also been frequently observed by visitors how remarkably sudden and uncomfortable a change of temperature is produced by the passage of a cloud before the sun's disk. It was no uncommon circumstance for a fall of 70° to 10° to be produced in about as many minutes.

"The pretended mildness of the nights has been a point on which much stress has been laid, constituting, as one circular remarks, 'the secret of the climate. In other climates, the night is almost invariably, and is always liable to be, colder and damper than the day. In St. Augustine, the reverse is the case, and thus the delicate lungs of a patient are secure from one of the greatest sources of irritation.' I can state that during the whole of my residence there, this was by no means the fact, nor do I believe, from the inquiries I made, that it ever is during the winter season. From the nature of my duties I had opportunity to notice the weather during almost every night, and can therefore speak with positiveness on this subject. During a portion of the summer months, it may be the case that the nights are not cooler than the days, and I am inclined to believe that the cooling effect of the daily trade winds, during what would otherwise be the intolerably hot season, has not been much exaggerated. This advantage however, is of very little moment to pulmonary invalids, very few of whom could be induced by any consideration to think of spending the year there, when the season of summer and early autumn offers no objection to a residence in the northern or middle states.

"No barometrical or hygrometrical observations have ever been registered at this place. I am persuaded that when they shall be, the boasted dryness of the atmosphere will be found to rest on no better evidence than its freedom from atmospherical vicissitudes.

"I did not commence keeping a register with regularity till some time after my arrival; not indeed, till I was convinced how erroneously and unfairly the former observations had been made. During this period, I would remark that a cold N. E. storm prevailed for about a week, followed by a warm, foggy atmosphere, in which the thermometer was as high as 74° several times, and a few days subsequently as low as 36°—white frost was also noticed.

"The thermometer, a register of which follows, was suspended at a northerly exposure, and in shade throughout the day."

Register of the Thermometer.

	Date.	at 7.	at 2.	at 7.	Winds and remarks.
Jan.	16	38	46	48	Cold west wind.
	17	26	40	32	N. W.
	18	21	45	38	At 3 o'clock, A. M. 25°—At 6 A. M. 22°.
	19	34	53	42	At 6 A. M. 28°—At 10 A. M. in the sun, 93°!
	20	33	62	48	White frost.
	21	42	64	59	Cloudy. Wind S. W.
	22	56	52	50	Rain in the night.
	23	32	57	46	E.—Cloudy.
	24	43	68	52	N. W. Do. [shade, 56°!
	25	42	64	49	At 10½ A. M. in the sun, 102°, same time in the
	26	36	68	54	S. E.
	27	44	76	57	Flying clouds.
	28	47	74	61	S.—Cloudy after M.
	29	63	73	67	Tremendous gale last night—showers A. M.
	30	54	63	56	Cold easterly storm.
	31	65	73	54	S. thick, with showers.
Feb.	1	48	69	58	Heavy fog A. M.
	2	50	76	59	E. [P. M. wind W.
	3	65	80	74	Violent E. wind through the night—thick clouds.
	4	43	50	41	Rain last night. In sun, at 1 P. M. therm. 90°.
	5	38	45	44	At 3 P. M. commenced *snow* and hail. Wind N.
	6	54	55	54	Thick cloudy. [therm. at 43°, cont'd 10 m.
	7	40	46	45	Do. do.
	8	42	56	46	Do. with rain.
	9	43	58	48	Do.
	10	39	51	44	
	11	41	69	48	[the sun, obscurely seen.
	12	46	51	43	Thick flying clouds. Wind E. Great eclipse of
	13	53	64	50	Wind N. E.; flying clouds.
	14	52	76	58	S.—cloudy, hazy.
	15	60	67	60	E.—cloudy, rain.
	16	63	72	63	E.— do. do. with heavy thunder.
	17	53	69	49	W.—clear at morning; P. M. cloudy and rain.
	18	48	63	48	N.
	19	54	62	56	N.—cloudy in part.
	20	53	70	54	N. E. flying clouds.
	21	61	77	60	Cloudy P. M.
	22	62	76	68	Cloudy, with a remarkably dense fog.
	23	56	70	59	N. In the sun at 1 P. M. therm. at 94°.
	24	46	71	55	N. W.
	25	54	70	58	N. W.
	26	53	71	58	N. W. and round to E.
	27	54	75	62	S. E.
	28	60	72	59	Heavy rains A. M., clear at 1 P. M.
March,	1	58	64	54	E.—cloudy.
	2	56	70	62	S. W.
	3	57			N. E.

"Were the question asked me, if I saw or heard of any well-authenticated instance of consumptive disease cured, relieved or protracted by any 'curative effect,' of this climate, truth would compel me to say I saw or heard of none, nor have I a doubt that many individuals, who were seduced there by misrepresentations, did not actually live as long as they would have done at the north;—the fatigues, exposure, want of medication, nursing, proper diet, &c. during an inclement winter passage on a dangerous and harbourless coast, added to the severe disappointment of finding none of their expectations fulfilled as to the place itself, undoubtedly accelerated the inevitable fate of the consumptive.

"To the individual labouring under well-marked consumption, using the term in its widest sense as characterizing the various forms of chronic pulmonary disease, the best advice I could offer as to change of climate would be the oriental benediction, 'May you die at home!' To those in the incipient stage, or strongly threatened, I would urge my conviction, that a well-regulated artificial temperature, and judicious medical and dietetic treatment, (and I may here, I hope without invidiousness, express my belief that pulmonary diseases are no where so well treated as in New England,) offer far greater hopes of relief than sea-voyaging or change of climate.

"The use of the *stethoscope*, for a want of an acquaintance with which, no apology can now be offered by the practitioner, certainly has thrown so much light upon, at least, the hopeless forms of consumptive disease, that no patient need be sent off in ignorance of his incurable state, to endure the miseries, privations, and disappointments of another climate."

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Experiments on Nicotiana Tabacum and Nicotine. By JOSEPH C. TURNPENNY.—In order to illustrate the properties of tobacco, and its proximate principle, nicotine, I have carefully performed the following experiments.

"*Experiment* 1. To half a pound of green tobacco, freshly gathered from the plants, eight ounces of pure water were added, in which it was digested three days; after which it was subjected to filtration and pressure. To the liquor thus obtained, about half a drachm of recently calcined magnesia was added, in order to discharge the nicotine from its natural combination in the plant.

"This infusion was then boiled a few minutes after the addition of the magnesia; when cold the clear liquor was decanted. While hot, the smell of tobacco was much more decided than a decoction of the same would have been without the addition of magnesia. The decanted liquor was introduced into a retort and submitted to distillation by the aid of an oil bath, temperature about 300° Fahrenheit; the nicotine passed over with the water, giving to it a slight amber colour. It commenced passing at the temperature of 260°, and its passage was very rapid at 325°. In operating on green tobacco, the process is much retarded by the presence of substances giving to the infusion a disposition to froth, and to throw itself into the neck of the retort. The amber-coloured liquor was strongly characterized by the odour of the purest kind of tobacco, and when agitated with sulphuric ether, (62° Baumé,) after decantation and evaporation, yielded a few grains of a slight yellow extract about the consistence of molasses, having a powerful odour of tobacco, sufficiently strong to excite, with energy, the nasal organ. The substance above described restores the blue colour of litmus paper reddened by an acid, and turns curcuma paper to a red; it forms combinations with acids in which its odour is restrained. It is unquestionably nicotine, slightly coloured by volatile colouring matter present in the plant.

"*Experiment* 2. Half a pound of green tobacco was subjected to digestion in eight ounces of water, acidulated with half a drachm of sulphuric acid. After three days, this was subjected to filtration and pressure, and the liquor treated with sufficient calcined magnesia to neutralize the acid. It was then submitted to distillation by the aid of an oil bath, the process being in all respects similar to the one already detailed in experiment No. 1; the result corresponding precisely with the former experiment.

"*Experiment* 3. Half a pound of dry leaves of Kentucky tobacco was digested four days in pure water, at the temperature of 70° Fahrenheit, after which it was strained, and the residue strongly pressed; a highly-coloured liquor charged with tobacco was obtained, of specific gravity 1048.04; to which, when raised to the temperature of about 180° Fahrenheit, one drachm of calcined magnesia was added, and the whole was agitated. After standing at rest, it was carefully decanted, and the clear liquor submitted to distillation by the aid of an oil bath, at the temperature of 309° Fahrenheit. The distillation was effected with comparative facility, and resulted in the production of a fluid, amber-coloured, and highly impregnated with the odour of tobacco. The residue, after distillation, which was suffered to cool in the retort, was of the consistence of molasses, and presented on the sides of the vessel a few granular crystals, formed either by the usual salts contained in tobacco, or some new compound occasioned by the introduction of magnesia.

"The amber-coloured liquor, when treated with sulphuric ether of 62° Baumé, afforded by evaporation a substance of the consistence of honey, very slightly coloured, and powerfully impregnated with the odour of tobacco; this, when evaporated nearly to dryness, yielded a granular mass.

"*Experiment* 4. The dried leaves of Kentucky tobacco, in quantity the same as in experiment 3, were submitted to water acidulated with sulphuric acid; after digesting four days, at the temperature of 70° Fahrenheit, the liquor was separated, and more than sufficient calcined magnesia added to neutralize the sulphuric acid. The clear liquor was submitted to distillation by the means of an oil bath, as in the last experiment, and the amber-coloured liquor was obtained, affording by the use of ether, the same product as there detailed.

"*Experiment* 5. The aromatic substance obtained by ether from the distilled amber-coloured liquors was combined with diluted sulphuric, hydrochloric, tartaric, oxalic and acetic acids; in each of the saline compounds, the aromatic odour was decidedly controlled by the acid, and almost suppressed in the sulphate, oxalate, and tartrate. When evaporated nearly to dryness, in several of the salts granular formations occurred, but no well-defined crystals.

"*Experiment* 6. The concentrated infusion of tobacco, as directed by the Edinburgh Dispensatory, was submitted to distillation by means of an oil bath, a liquor was obtained of a light amber colour, charged with the peculiar aroma of tobacco; (not so decidedly as that obtained after the introduction of calcined magnesia into the infusion, in a previous experiment,) this liquor changed curcuma paper to a light brown, which a diluted acid restored to its original colour. Litmus paper, reddened by an acid, was also restored by this liquor to its original colour. Tincture of nut-galls produced a copious light-yellow precipitate.

"This liquor, after remaining forty-two days, had not in the least changed its appearance. It is difficult to account for the substance said to have been produced by Hambstadt in the experiments alluded to by the Edinburgh Dispensatory; particularly as the nicotine is very soluble in water, and does not crystallize.

"*Experiment* 7. The products from the infusions of tobacco were submitted to distillation after having been nearly exhausted by sulphuric ether, of 62° Baumé, were saturated with dilute sulphuric acid, and then evaporated at the temperature of 212° Fahrenheit; a thick coloured extract was the result with traces of crystalline forms—this extract, when perfectly dry, was submitted to anhydrous alcohol, (about 40° Baumé,) from which the sulphate of nicotine was obtained in solution, and a small portion of sulphate of ammonia, in distinct crystals, were left undissolved. The ammonia resulted from the reäction of the magnesia on a salt of ammonia contained in the infusion of tobacco, and its combination with sulphuric acid from the addition of the latter previous to the evaporation above alluded to.

"The following experiments illustrate the physiological character of nicotine, and although foreign to the science of pharmacy, I consider of sufficient interest to be recorded.

"*Experiment* 8. About one-sixteenth of a grain of hydrochlorate of nicotine was given to a healthy mouse. The symptoms which immediately ensued were violent spasms of the limbs and body, laborious breathing, great prostration, nausea, inclination to sleep, pupils largely dilated, weakness in the extremities, especially the posterior, and in the course of a few hours the animal died.

"*Experiment* 9. To a healthy mouse, a minute portion of the oxalate of nicotine was given on the point of a large needle; a narcotic effect was immediately produced—laborious breathing and vomiting. In the course of half an hour the animal recovered.

"*Experiment* 10. To a half grown healthy cat, about one-eighth of a grain of the hydrochlorate of nicotine, dissolved in water, was given. An almost instantaneous evidence of the influence of a powerful narcotic was manifested, followed by prostration, with nausea and vomiting—first, the contents of the stomach, then frothy mucus, with violent retching. The head was inclined downwards, and the pupils dilated. The animal having vomited five or six times, gradually recovered, and appeared perfectly well thirty minutes after the exhibition of the nicotine.

"*Experiment* 11. To the same cat about half a grain of the hydrochlorate of nicotine was given, dissolved in water; all the symptoms of a narcotic character evinced as before, were now manifested in the most aggravated form; the ears were drawn closely down upon the back of the head, she made one or two efforts to walk, when she fell, in a state of the greatest prostration, with slight convulsions of the posterior extremities; evacuation of the contents of the rectum, the ears recovering their natural position, but not their sensibility to the touch; the posterior extremities seemed no longer to be under her controul; being thrown in an opposite direction to that of the anterior, thereby giving a spiral twist to the back; pupils fully dilated; squinting of the eyes, turned upwards and outwards; alternately laborious, hurried breathing, with rattling in the lungs and deep inspirations. In this apparently dying state, she laid about thirty minutes, after which she gradually recovered, making violent efforts to vomit, ejecting small quantities of frothy mucus. In the space of sixty minutes she had command of her extremities, but still manifested inclination to coma, with want of appetite. In about three hours, she had entirely recovered, with the exception of great weakness, and took food with avidity."—*Journal of the Phil. College of Pharmacy,* Oct. 1833.

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Cholera.—It has been doubted by some physicians that cholera ever appeared in the open country, and in sequestered farm houses; the following statement by the able editor of the *Western Journal of the Medical and Physical Sciences* is conclusive on this point, and furnishes moreover other information relative to the disease of considerable interest. The proofs which Dr. Drake alludes to, as adduced in favour of the contagiousness of cholera, appear to us to have even less force than he attaches to them.

"For several weeks the northern parts of Kentucky have been ravaged by the Epidemic. It *seems* to have extended from the river, at Maysville, into the interior, and yet it appeared at Lexington and Georgetown, *before* it broke out in Paris and Millersburgh, towns which lie on the great road leading to the ancient metropolis of the state. It is, however, by no means confined to the villages, but invades the most sequestered farm houses, where, in many instances, it has been more fatal, than in the towns. Among other spots it has put forth its power at the Blue Licks and Harrodsburg, old and salubrious watering places; at which not a few were assembled, under the delusive impression, that it would not visit such spots. So far from being safe situations, however, we have understood that the salino-sulphur waters of the Blue Licks, which operate as a cathartic, were found in several cases to be an exciting cause.

"In all the towns and villages of the region where it prevails, a flight has been the consequence of its first appearance. The idea of contagion seems to have been uppermost in the public mind; and escape, regarded as the only preventive. Even the medical mind of that district of country, has been mystified by the same phantom; and in several places, the physicians have not only recommended flight to the inhabitants, but have actually flown themselves; leaving those who could not escape, to grapple with the danger as they might! It is with pain we record such circumstances; but they make a part of the history of the Epidemic, and throw much light on the causes of its great mortality, in a tract of country, where from the dryness of the calcarious soil, the abundance of subsistence, the comfortable style of living, the orderly habits, and the general intelligence of the people, a mitigated visitation might have been reasonably anticipated.

"Last summer the same portion of the state was visited by the Epidemic, in the form of a mild diarrhœa, and in autumn a number of deaths occurred in Maysville, Lexington, and other towns; but it was decidedly fatal in Frankfort only; which, it is worthy of remark, remains almost unaffected the present summer, although most of the surrounding villages and farms are sorely afflicted. The same is true, in nearly an equal degree, of Louisville, which suffered much more, last autumn, than during the present spring and summer.

"We have said, that the epidemic seemed to *advance into* Kentucky from the Ohio river; from the same, it has appeared to advance into the state of Ohio. Many of the towns and villages on both banks of the river have been invaded, and are now suffering, quite up to Pittsburg, which, although defended by a quarantine battery, eight or ten miles below the city, has had a number of cases. At Wheeling, not less than in Maysville, it was more severe and fatal. At Bridgeport, opposite the former, it proved suddenly and dreadfully mortal, though on the first day, almost all the inhabitants fled. Steubenville, Gallipolis, and other smaller towns, as New Richmond, twenty miles above Cincinnati, are now suffering more or less. In the rear of all these places, indeed, in the southern portions of the state of Ohio, generally, as in the northern parts of Kentucky, it is daily manifesting itself in some new locality. Thus it seems, like the exhalations of the river, to spread from its valley over the adjoining parts of these two states, and equally, as we understand, over Indiana and Illinois. Indeed the region of country through which the river runs, is that, where, in the west, the disease is now most prevalent; its banks were the first affected, its bed *seems* to be the *nidus* of the pestilence. Thus the spread of cholera in this country, affords, as it has afforded in all others, much *prima facie* evidence of contagion—evidence which the credulous think conclusive, and the most philosophical find perplexing.

"To this seeming proof of contagious dissemination, we may oppose the unquestionable facts,—that diarrhœa or cholerine is generally prevalent throughout the same region; that fatal cholera has occurred, nearly at the same time, in places remote from each other; that the epidemic distemperature appeared along the great rivers, on nearly the same days, from the Gulf of Mexico to the mountains; that some villages, at which steam boats have constantly landed, have not yet been attacked; that villages comparatively near to, and in constant intercourse with, towns where the disease prevailed, still remain unaffected, while others more remote are laid waste; as for example, Mayslick, twelve miles from Maysville, on the Lexington road, which remains untouched, while Fleminsburg, eight miles further off, and remote from the great highway, has already suffered to a degree seldom equalled any where; finally, that the experience of every day augments the number of cases, which could not have been contracted by exposure to others labouring under the malady.

"Now, if *any* case of cholera arise, independently of contagion, *every* case may, and from the moment when it is shown, that the disease can be produced without contagion, it is sound medical logic to conclude that no such principle exists. This conclusion, however, must not be regarded as definitive and final, unless it is shown, that a disease, which sometimes originates from some other cause than contagion, can never originate from that cause. Still, it is incumbent on the contagionist to make out every case by special proofs; but in attempting this, they must necessarily labour under this disadvantage—that as the atmosphere is impregnated with a poison which sometimes, at least, produces the disease, it is impossible, in the case in which it follows exposure to a choleric chamber atmosphere, to know whether the disease really arose from that cause. The individual might have been attacked from the other cause if he had not been subject to contact with the sick. In the case of one individual, only, this presumption might always be made; but what shall we say of those well-authenticated instances in which several members of a family, and sometimes the visitors, are successively taken down, in places where the disease is not prevailing? There are examples of this kind which, we must acknowledge, are embarrassing to the non-contagionists; but they do not *establish* the existence of contagion—they only render it probable."

Cephalic Bellows-Sound.—The September No. of our cotemporary, the *Medical Magazine,* contains some highly interesting observations by Dr. John Fisher of Boston, on a bellows-sound observed in the head. This sound was first discovered by him in July, 1832, in a child two and a half years of age, affected with chronic hydrocephalus. On applying his ear to this child's head, to his surprise he heard a very loud and distinct bellows-sound, resembling that caused by certain diseases of the heart. Dr. Fisher has since met with it in five other cases of cerebral affections, in all of which the sound was very distinct. Whether it be present in all diseases of the brain, Dr. Fisher has not yet ascertained. "Having heard the sound," he remarks, "a second time, the idea occurred to me that it might be a normal one, and the unceasing result of health. To determine this point I immediately began to examine the heads of healthy persons of all ages, and from many careful and repeated observations I find that in children, previous to the commencement of dentition, auscultation discovers no sound in the head resembling the bellows-sound. The sound produced by the impinging of the air during respiration, against the walls of the nasal cavities; those produced by the act of swallowing and of speaking, and by the heart's motions, can be easily heard and distinguished from each other. In children during the process of dentition I have, besides the sounds just mentioned, frequently detected a cephalic bellows-sound. The sound was not present in all teething children, but in those only who suffered much from the process of dentition. And in these, the cephalic bellows-sound differed somewhat from that which was heard in the patients who died of dropsy in the brain, in being more abrupt, shorter and less diffused. It might have been denominated the bruit de rape rather than bruit de soufflet, as it resembled more strikingly the action of a file than of a bellows. And in no instance have I noticed it to pass into a continuous murmur or to assume a musical tone. It maintained one uniform character.

"It was in the early period of the first dentition and previously to the closure of the anterior fontanelle, that the sound was most frequently and distinctly heard. In one instance only have I heard it, after the development of the first twenty teeth; and in this one instance the boy was cutting the remaining double teeth. Neither in healthy adults or aged persons have I been able to detect the sound, although I have repeatedly and with great attention auscultated the heads of such subjects to ascertain if it did exist in them. I have not as yet discovered that the cephalic bellows-sound accompanies any malady, other than those which mediately or immediately affect the brain. In a case of severe peripneumony, however, I recollect that the sound existed. It was loud and well-marked, and was heard by Dr. James Jackson, who saw the child with me; but the little patient was cutting its teeth and had suffered much from the process. In two cases of hooping cough I noticed the sound very distinctly, when I applied my ear upon the patient's head at the instant the paroxysm of coughing ceased. The sound continued but for a moment, and only while the face continued to be flushed by the accumulation of blood in and about the head. I have seated myself for a long time by the child, and waited patiently for the return of the fit of coughing that I might, by repeated observations, satisfy myself of the truth of the fact above stated. In every instance of severe coughing the sound was produced, but it disappeared as soon as the child began to breathe freely, and the circulation became again unobstructed and natural. Such are the facts which I have collected in relation to this new phenomenon."

Dr. Fisher thinks, that it is clearly proved from the observations made in the six cases in which he has observed the cephalic bellows-sound, that this sound originates in the arteries. "For in the first place," he observes, "the sound was distinct from that produced by respiration, by deglutition, muscular action, or any other operation going on within the head, that we can conceive of, save arterial action. Secondly, it was synchronous with the pulsations and impulse of the heart, and of the carotid and temporal arteries, and also with the rising and impulse of the brain as observed by placing the finger upon the unclosed fontanelle. Thirdly, the sound ceased to be heard, or at any rate was rendered less distinct, by compressing the carotid arteries and arresting the circulation in them, and it became less audible as the patient grew weak and the pulse feeble. Fourthly, it resembled in all respects the bruit de soufflet which we hear in diseases of the heart and of the arteries, and particularly in aneurism of the latter vessels. Fifthly, in looking at the structure and composition of the organs contained within the cranium, we must be convinced that the arteries were the only organs which could have sent forth a bellows-sound like those I have noticed. Assuming it as proved that the sound proceeded from the arteries, I may further observe that those situated at the base of the brain, were probably the ones in which it originated. I infer this from a consideration of the distribution of the arteries within the head. Anatomy teaches us that all those of any considerable size are situated at the base of the brain, and rest upon unyielding bony structure. Having passed through their appropriate apertures and osseous canals, they course along upon the base of the skull and in furrows formed for them in the brain, and soon subdivide and spread themselves upon the pia mater, and do not actually enter the substance of the brain until they become mere capillary vessels. There is, therefore, no artery existing in the cerebral substance, and no one running over its surface, of sufficient caliber to send forth a bellows-sound as distinct and audible as were those I have heard. For to produce a bellows-sound in an artery artificially, I find that the artery must be of considerable size, and must rest upon rather an unyielding surface, otherwise it will not be placed in a condition necessary for the production of the sound. A further proof that the arteries at the base of the brain were the seat of the phenomenon, is derived from the motions of the brain as seen and felt at the fontanelle. These are evidently caused by the pulsations of the arteries on which the organ rests. The bellows-sound always accompanies and is synchronous with the elevation of the cerebral mass; and as there is no other cause to account for this, it follows that the sound must have arisen from these vessels. The facility with which it was heard at the summit of the cranium is no argument against this conclusion. For the brain is an excellent conductor of sound, as is proved by the fact that it readily transmits the noise produced by the action of a watch. If then the bellows-sound proceeded from the arteries at the base of the brain, its production in the cases I have mentioned may be readily accounted for. It is now a well-established fact, that the bellows-sound of the heart and of the arteries arises from an impediment to the flow of the blood through these organs. The cephalic bellows-sound which I have described, unquestionably arose from such a cause. In all the cases in which it was present, there was either dropsy of the brain, or a congestion of the blood-vessels within it; and the brain being incompressible and acted upon by these causes, was forced against the arteries at its base, and must have contracted them at certain points. This condition of the arteries obstructed in a degree the passage of the blood through them, and was the immediate cause of the cephalic bellows-sound. If this be the true explanation of the existence of the sound, we may expect its presence in all diseases which may in any considerable degree compress the brain, and we may perhaps venture to hope that a physical sign has been discovered, which will prove to be a pathognomonic symptom of cerebral disease."

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BOURGERY'S *Petite Chirurgie*.—We are happy to announce that a translation by Drs. W. C. ROBERTS and J. B. KISSAM of this excellent work, is now in the press. Its publication may be expected in the course of the ensuing month.

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Baltimore Medical and Surgical Journal and Review.—Just as this form was preparing for press, we received the first No. of this work, of course too late to do more than just glance at its contents. From the known talents and indefatigable industry of its editor, E. GEDDINGS, M. D., however, no doubt can be entertained of the value of its contents, and of the ability with which it will be conducted. We shall have the pleasure of introducing it more particularly to our readers in our next.